# \*115509\*

Page 1

April-02-14 11:15:13 AM Item ID: Accept D3391-025 \*N900040100\* Setup Start Revision ID: **Item Name:** Aft Tube Assembly **Start Date:** Start Qty: 1.00 4/02/14 **Cust Item ID:** Required Date: 4/16/14 **Req'd Qty:** 1.00 \*1\* **Customer:** Reference: Run. Approvals: Process Plan: MLJ Date: 1404-02 Tooling: Date: Stop Date: \_\_\_\_\_ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool # Plan **Tool ID** Accept Reject Reject Insp. **Work Center ID** Description **Run Hours** Qty Qty Code Number Stamp **Draw Nbr Revision Nbr** D3391 I 0.00 MORI SEIKI CNC LATHE LARGE 0.00 Memo Mori Seiki CNC Lathe Large Rev: AA & Dwg D3391 Rev: H Turn as per Folio FA599 \*\*\*\*REMOVE STEADY REST AND MACHINIG MARKS\*\*\*\* QC2- Inspect parts off machine FAI/FAIB 0.00 0.00 Memo Quality Control QC5- Inspect part completeness to step on W/O Memó Quality Control

	Work Order ID 115509  April-02-14 11:15:13 AM			*115509*								
Item ID: Revision ID:	D3391-025			Accept	*N900	)*	Setup Sta	17	S1*			
Item Name: Start Date: Required Date	Aft Tube As 4/02/14 2: 4/16/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	ID:	. · · · ·	Sto	ν *N	S2*		
Reference:			·		Customer.	·	J	Run Sta	rt <b>La</b> i			
Approvals:		lan:		_ Tooling: _ _ SPC (Y/N):		ate:		Sto	" <b>"</b> [ <b>V</b>	R1* R2*		
Sequence ID/ Work Center 1	ID	Operation Description	,	Set Up/ Run Hours	Tool ID	Tool # Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp		
*120* HAAS 1 HAAS CNC vertice	al machine #1	HAAS CNC VERTICAI  Memo  1-Machine a 2-Deburr		0.00 44 & Dwg D3391 Rev:	onl 141	04/28		_ <i>L</i>		14 9-89		
130 *1,2 <b>0</b> *		QC2- Inspect parts off m	achine FAI/FAIB	0.00	an 2/4/	/v4/28	/_			DAS 14 9-89		
240 <b>*140</b>		QC8- Inspect parts - seco	ond check	0.00			1	Ø		DAS 44 9-89		

0.00

\*\*\*INSPECT INSIDE BORE\*\*\*

14/04/28

\*140\* QC

Quality Control



### \*115509\*

Page 3

April-02-14 11:15:13 AM

f	
Item ID:	D3391-025

Accept

\*N900040100\*

Setup Start

**Revision ID:** 

Item Name:

Required Date: 4/16/14

Aft Tube Assembly

Start Qty: 1.00 4/02/14

\*1\* \*1\*

Date: \_\_\_\_\_

**Cust Item ID:** 

**Customer:** 

Reference:

Start Date:

Approvals:

Process Plan: Date:

Tooling:

SPC (Y/N):

Date:

Date:

Start

Run

Stop

Sequence ID/ **Work Center ID**  **Operation Description** 

Reg'd Qty: 1.00

Set Up/ **Run Hours**  **Tool ID** 

Tool # Plan Code Accept **Qty** 

Reject Oty

Reject Insp. Stamp Number

150

\*150\* Skidtubes 5 4 1

Skidtubes

Memo

0.00

0.00

Skidtubes

1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803

160

\*160\* CNC Bend 1

**BENDING MACHINE - SKIDTUBES** 

Memo

0.00

0.00

CNC Delta 100 Bender

Form as per Dwg D3391 Using Bend Prog 3391025

De 14/04/29

170

QC5- Inspect part completeness to step on W/O

0.00

\*170\*

OC

Memo

Quality Control

0.00

#-4,3

April-02-14 11:	pril-02-14 11:15:13 AM			^11!	15091						Page
Item ID: Revision ID:	D3391-025			Accept	*N900	040	110	<b>n</b> *	Setup Start	*N	S1*
!	Aft Tube Ass	sembly						·	Stop	*NI	<b>C</b> 2*
Start Date:	4/02/14	Start Qty: 1.00	*1*		Cust Item	ID:				1 14	. 17
Required Date: Reference:	4/16/14	Req'd Qty: 1.00	*1*		Customer:						
Approvals:	Process Pl	lan:	Date:	Tooling:	<b>D</b>	ate:		I	Run Start	<b>^</b> I∕I	R1*
<b>†</b>	QC:		_ Date:	_ SPC (Y/N):	D	ate:			Stop	*N	R2*
Sequence ID/ Work Center ID	) `	Operation Description	(	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	•	Reject Number	Insp. Stamp
180		Skidtubes		0.00				- <b>-</b>	111/	./	
*120* Skidtubes		Memo		0.00				De	19/05	<u> </u>	-
Skidtubes			cap pilot hole to .208" as	per Dwg D3391					/		
!		2-Drill float	bag holes using DT8809	as per Dwg D3391(Holes	marked "A" Only.						
ļ		Wearplate Ji	plate holes as per Dwg D3 ig . ot Open To Finished Size*	•	Гube) & DT8217						
; i			rshoe holes as per DWG l rilled aft wearplate holes.		ating from 2					·	
		5-Open wea	rplate holes to 0.297" and	c'bore as per dwg D3391							
		6-Open up a	all float bag holes to 0.328	" and c'sink as per Dwg D	3291.						
		7-Deburr									

8- Scribe batch # on fwd end

Work Order ID 115509  April-02-14 11:15:13 AM				*115509*								Page			
Item ID: Revision ID:	D3391-0			STANDARD SECTION	Accept	*	N900	<b>040</b>	100	ገ*	Setup	Start Stop	·· 1 VI .	S1*	
Item Name: Start Date: Required Date: Reference:	Aft Tube A 4/02/14 4/16/14	Assembly Start Qt Req'd Q	•	*1 *1			Cust Item I Customer:	D:				Stop	*N;	S2*	
Approvals:	Process QC:	Plan:		Date:	Tooling SPC (Y/			ate:			Run	Start Stop		R1* R2*	
Sequence ID/ Work Center I	D	Operatio Descripti			Set U Run 0.00	Jp/ Hours	Tool ID	Tool#	Plan Code	Accept Qty	t Rej Qty	•	Reject Number	Insp. Stamp	_
*2200* Skidtubes Skidtubes		Skidtubes	2- Grind cro	acers as per dwg D3 abond 6398 Batch 14/65/05 2hrs as per QSI001: ossbolts flush I using #9 drill Magnabond	0.00 391 ::/272274 =		     05   06	ç					<u> </u>		
230 * <b>230</b> QC		QC5- Inspe	ect part comp	leteness to step on \	W/O 0.00 0.00	14/5/6									

Quality Control

Work Order II April-02-14 11:15:13			*11 <i>5</i>				Page	7			
Item ID: D339 Revision ID: Item Name: Aft Tu	1-025 be Assembly		Accept	*N900	<b>040</b>	100	)*	Setup Start Stop	171	S1* S2*	
Start Date: 4/02/1 Required Date: 4/16/1 Reference:	~ •	*1* *1*		Cust Item I Customer:	D:						
	ess Plan:	Date:	Tooling: SPC (Y/N):		ate:			Run Start Stop	^!\ <u>\</u>	R1* R2*	
Sequence ID/ Work Center ID 235	Operation Description Pressure Wash per QS10	05 4.3	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty		Reject Number	Insp. Stamp	
* <b>925</b> * HandFinish Hand Finishing	Memo	ODINE AS PER PAR09	0.00				_1	_76	145	- 26	_
<sup>240</sup> <b>*24∩*</b>	White Gloss(Ref:4.3.5.1	) per QSI905 4.3-Alum	0.00				/	B 14	-716	ź.	0AS 34 9-89

250

Powdercoat

Powder Coating

START TIME OVEN TEMPERATE FINISH TIME:

QC3- Inspect Part Finish

Memo

\*250\* Quality Control

0.00

0.00

0.00

DQA:	Ship	Date	: 14/0	8/61		_						$\Box$ DART
QA Closed:	K	Date	:14/	7/2	<b>WORK ORDER NON</b>	-C(	ONFO	RMANCE / UPDA		ork Order up	odate only	AEROSPACE
Work Ord	er:	11550	29		DISPOSITION			A	GAINST DE	PARTMENT	/PROCESS	
l					Rework Scrap Use-as-is Suspected Unapproved	Scrap   Machining   Small Fab   Prod. Eng. Coor.   Use-as-is   Thermoforming   Finishing   Rec/Store/Packaging   Supplier   Supplier			Engineering Quality Other			
Root Cause	Da	te Step	Qty	Descr	iption of work order update or non-conformance		Initial nief Eng	Action Description	n	Sign & Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved	X Not	240 260 (240 dos		LARS	waith to be posser	(	anlit	Hart J	touhp		DAS 15 9-89	DAS 16 9-89 Q>2042 14/07/19
Landi	ng Gear				General	ГА	ULI CA	IEGURT				
:	Bend Centr Crack Crimp Cuffs Crush Heat Inspe	e Not Conce s /Kink/Ripple ing Treat ction Strip in s/Chatter ng Sequence	e/Wave		Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspect Instruc Misalia Mislabo Misrea Off-set Out of	tion Incomplete/Unqualitions Incomplete/Unclear gned/off center eled d		Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ct ssing Vrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
	I IWave	/Twist in Tu	be		Fit/Function		Out of	Sequence			-	

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

Work Order ID 115509 \*115509\* Page 8 April-02-14 11:15:13 AM Item ID: D3391-025 Accept \*N900040100\* Setup Start **Revision ID:** Stop **Item Name:** Aft Tube Assembly **Start Date:** \*1\* 4/02/14 Start Qty: 1.00 **Cust Item ID:** Required Date: 4/16/14 Req'd Qty: 1.00 \*1\* **Customer:** Reference: Run Start Date: Approvals: Process Plan: Tooling: Date: Stop Date: SPC (Y/N): OC: Date: Sequence ID/ Operation Tool ID Reject Set Up/ Tool # Plan Accept Reject Insp. **Work Center ID Description Run Hours** Code Qty **Qty** Number Stamp 260 0.00 HandFinishing \*260\* HandFinish 0.00 1-Install inserts as per Dwg D3391 Hand Finishing 2-Install Aft Cap as per Dwg D3391 A/R Sikaflex-241/-291 JA (74457 Sikaflex expiry date: 3- INSTALL WEARPLATES AS PER DWG 270 QC5- Inspect part completeness to step on W/O

0.00 28

**Quality Control** 

Memo

0.00

280

\*220\* Packaging

Memo

0.00

0.00 D412-742-043/13112194

Packaging

Identify as per dwg & Stock Location: \( \omega \)

Work Order ID 115509 \*115509\* Page 9 April-02-14 11:15:13 AM D3391-025 Accept Item ID: \*N900040100\* Setup Start **Revision ID: Item Name:** Aft Tube Assembly **Start Date:** 4/02/14 Start Qty: 1.00 \*1\* **Cust Item ID:** Required Date: 4/16/14 Req'd Qty: 1.00 \*1\* **Customer:** Reference: Start Run **Approvals:** Process Plan: Date: **Tooling:** Date: Stop QC: Date: **SPC (Y/N):** Date: Sequence ID/ Operation Set Up/ Tool ID Reject Reject Tool # Plan Insp. Accept **Work Center ID** Description Code Qty Qty Number Stamp **Run Hours** 290 QC21- Final Inspection - Work Order Release 0.00

0.00

Memo

\*290\*

**Quality Control** 

mf 14-7-21

\* i...

#### **Picklist Print**

April-02-14 11:15:15 AM

Work Order ID: 115509

\*115509\*

Parent Item:

D3391-025

\*D3391-025\*

Parent Item Name: Aft Tube Assembly

**Start Date:** 4/02/14

Required Date: 4/16/14

Start Qty: 1.00

Required Oty: 1.00

**Comments:** 

IPP Rev B 06-02-07 IPP Rev:C

06-03-28

ECN773 dwg rev. D EC Update Manuf. Instructions JLM

IPP rev D 07.03.20 revF dwg

EC

IPP rev E 07.11.07

rev G dwg ecn 1053p EC verified by: DD

IPP Rev:F 07-11-13

ECN 1056

DD verified by: EC

IPP Rev:G 08-09-10 revH as per dwg DD verified by:EC IPP Rev:H

11.11.14 AS PER REV.I DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4095-047		Manufactured	No		5·**	260	Each	18.0000	1	1 .		(	
*D4095-04 Wearpad Assembly	17*								**	H	Ich	67/1	δ
		•		Location		Loc	<u>Otv</u>	Loc Code					
				FP001			18	•	_	Viv	_		
					102241		2		_	V 1	-		
D4095-049		Manufactured	No		108289	260	16 Eh	12 0000	. –	X	-		
	10±	Manufactured	NO			260	Each	13.0000	1	1	۱۸	1	1
*D4095-04 Wearpad Assembly	19×								**	للإ	<u>U</u>	rul 02	118
				Location		Loc	<u>Otv</u>	Loc Code	•				
				FP001			12		_		_		
					109670		12		<del></del>	УL	-		
				FP002	100016		1		_		_		
D6014-090		Manufactured	No		102216	100	1 Each	69.0000	1 -	1	-		
	<b>70</b> #	Manufactureu	140			100	Eacii	09.0000	•	1			
*D6014-09 ALUMINUM EXTRUSION									**				
				Location		Loc	<u>Oty</u>	Loc Code					
				LG003			69		_		_		
					79742		17		_		_		
				(	86063		52		_		-mm	L 141	acilia

April-02-14 11:15:16 AM

Work Order ID: 115509

\*115509\* D3391-025 \*D3391-025\*

Parent Item Name: Aft Tube Assembly

**Start Date:** 4/02/14

Required Date: 4/16/14

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Parent Item:

Manufactured

230

Each

300.0000

Loc Code

\*D3670-4-200\*

Bushing

Location Loc Qty FG 10 87709 10 LG001 290 39 109108 242 9

270

D2646

Manufactured

Each

75.0000

\*\*

Aft Cap

Location	Loc Qty	Loc Code	
FG	4		
85848	2		
90495	2		
FP001	71		
103306	14		
107857	1		
110816	18		
113830	38		NA

#### **Picklist Print**

April-02-14 11:15:16 AM

Work Order ID: 115509

\*115509\*

Parent Item: Parent Item Name: Aft Tube Assembly

D3391-025

\*D3391-025\*

**Start Date:** 4/02/14

Required Date: 4/16/14

Start Qty: 1.00

\*\*

Required Qty: 1.00

D3672-1

Manufactured

270

Each

1,420.000

\*D3672-1\*

Phenolic Washer

Location Loc Qty Loc Code FG 10 85222 10 ST060 1410 103845 4 112218 500 113581 500 93886 224 99099 182 260 Each 9,937.000 14 14

ALS4-1032-130

AELS4-1032-130 Purchased

No

\*\*

\*AI S4-1032-130\*

Rivnut

Location	<u>1</u>	Loc Oty	Loc Code	
FP001		9832		
	M128649	9832		X14
ST279	-	48	0	
	M128211	48	i e	
st510		57	•	
	M126109	57		

April-02-14 11:15:16 AM

Work Order ID: 115509

D3391-025

Parent Item Name: Aft Tube Assembly

\*115509\* \*D3391-025\*

**Start Date: 4/02/14** 

Required Date: 4/16/14

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-225

Parent Item:

AELS8-1032-225 Purchased

\*AI S4-1032-225\* 🔾

Purchased

270

Each

1,490.000

\*\*

<b>Location</b>	Loc Oty	Loc Code		
FG	30			
M127028	30			
FP001	1000			
M128649	1000			
ST280	426	•		
M127028	10			
M128179	416			
st555	34		X O	
M127092	34			
•	270 Each	2,208.000 6	6	
		**	<b>₩</b>	ladio

\*AN3C4A\*

AN3C4A

H 11/03/18

Location		Loc Qty	Loc Code	
FG		20	M128879	
1	122814	20	(46(60011	<u> </u>
ST350/513	}	1000	· ·	
N	M128606	1000		
ST512		3		
1	124221	3		
ST513		1185		
1	125388	122		
Ŋ	M127410	1		
1	M127832	62		
Ŋ	M128634	1000		

April-02-14 11:15:16 AM

Work Order ID: 115509

\*115509\* \*D3391-025\*

Parent Item:

D3391-025

Parent Item Name: Aft Tube Assembly

**Start Date:** 4/02/14

\*\*

\*\*

Required Date: 4/16/14

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

Purchased

No

270

Each

705.0000

\*AN3C5A\*

Location	<u>n</u>	Loc Qty	Loc Code	
FG		5	11128811	_ 14_
	122800	5	11160	
ST350		700		
	M128057	700		

NAS1149C0332R

Purchased

No

270

Each

9,644.000

10

10

## \*NAS1149C0332R\*

WASHER

Location Loc Oty Loc Code GA 1005 1129499 125654 1005 ST292 4968 m128591 4968 st510 3671 m126319 61 m127306 2500 m127410 1084 m127831 26

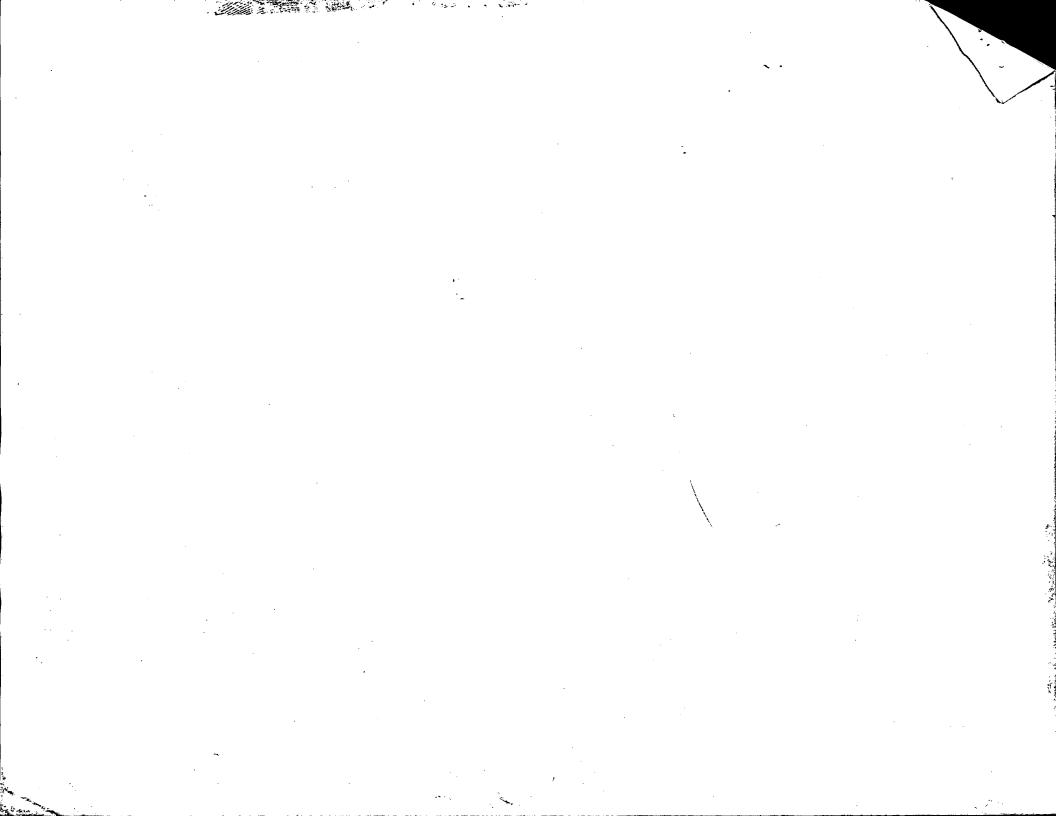
VIO

April-02-14 11:15:16 AM

**Shop Packet Print** 

Page 5

DQA:			Date:										TAART
						WORK ORDER NON	-CC	ONFO	RMANCE / UPDA				AEROSPACE
QA Closed:			Date:		,					Wo	ork Order up	date only	
Work Order:				DISPOSITION	AGAINST		GAINST DE	PARTMENT	PROCESS				
Part N	 No					Rework Scrap Use-as-is Suspected Unapproved		l .	Machining Sn noforming Fi	osstube nall Fab inishing mposite	1	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Desci	ription of work order update	l	Initial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Description	า	Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved							EAL	ULT CA1	ECORY				
Landii	20 GO	25				Conord	FAI	ULI CAI	EGURT				
Landi	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence					General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	on Incomplete/Unqualif ions Incomplete/Unclea ned/off center led	fied r	Outside Dime Over/Under Part Incorred Part Lost/Mis Part Moved Positioned W Power Loss/S	tolerance ct sssing /rong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
	_		ist in Tub	ie	-	Fit/Function	$\vdash$	4	Seguence		•		



DART AEROSPACE LTD	Work Order:	115569:
Description: Float Skidtube (412)	Part Number:	D3391-3
<i>₩</i> .		\$45.
Inspection Dwg: D3391 Rev: I		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
		Lat	the Section	n		
14.000	+/-0.010	14.00			type	46-25
3.500	+/-0.010	3.50/			vern	
Ø3.200	+/-0.010	3.199			)	
Ø3.750	+/-0.010	7.750				
30° x 0.060 chamfer	+/-0.010	30°×.06			J	,
88.93	+/-0.030	88.93			torre	L6-25

			<u>′</u>
Measured by: 90 m C	Date: /4//	04/10	6
		1./1.	
Audited by: 5m2	Date: /4/	4 12	Z
		1 /	

		HA	AS Sectio	n	
1.526	+0.000/-0.030	1.500	7	Vem	41-06
7.500	+/-0.010	7.500	_	11	
27.750	+/-0.010	27.750		M-taxe	RL-08
31.750	+/-0.010	31.750	1	11	
35.250	+/-0.010	35.250		11	
3.300	+/-0.010	3,305		Vem	ML-0L
0.200	+/-0.010	.200		u	
3.520	+/-0.010	3.523		10	
0.687	+0.010/-0.000	.690		11	,
R0.062	+/-0.010	R-062		R-la	
Ø0.484	+0.005/-0.001	B. 485		Vern	ML-06

Measured by:	Date: 14/04/28
Audited by: F.K.	Date: 14/04/2왕

Rev	Date	Change	Revised by	Approved
Α	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
В	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	
G	09.11.16	Dimension 0.200 removed	KJ	
Н	11.06.21	Dimension 44.995 removed	KJ	
1	12.05.15	Dwg Rev updated	KJ	
J	12.05.23	Dimension updated	KJ	ļ
K	12.10.15	88.93 dimension removed	KJ 10	<b></b>
L	12.11.28	88.93 dimension added	KJ 💖	<u> </u>



